

Daily GLOWBUGS

Digest: V1 #126

via AB4EL Web Digests @ SunSITE

Purpose: building and operating vacuum tube-based QRP rigs

[AB4EL Ham Radio Homepage @ SunSITE](#)

%%%% GlowBugs %%%% GlowBugs %%%% GlowBugs %%%% GlowBugs %%%%

Subject: glowbugs V1 #126

glowbugs

Thursday, October 2 1997

Volume 01 : Number 126

Date: Wed, 1 Oct 1997 14:20:02 -0700 (MST)

From: Jeff Duntemann <jeffd@coriolis.com>

Subject: Re: Ticket for Boatanchors and glowbugs....

At 05:04 PM 10/1/97 -0400, Brian Carling wrote:

>Mr. Duntemann,

>

>What time & frequency is this Junk Box Net??

>

>Location(s)?

>

>Thanks & 73 de AF4K

>

The Junkbox Radio Net (supposedly) happens every Sunday at 7PM local time here in Phoenix, on 50.4 Mhz, AM. It got soft during the summer, and I'm hoping that once the weather breaks a little (it's still 102 here) the guys will get back down to the serious business of modulating amplitudinally. Until the band opens up some it'll be pretty local, though. Not a lot of MD check-ins. Could use some, tho!

- --73--

- --Jeff Duntemann K7JPD
Scottsdale, Arizona

Date: Wed, 1 Oct 1997 17:55:04 -0400

From: "Brian Carling" <bry@mnsinc.com>

Subject: Re: Ticket for Boatanchors and glowbugs....

OK - thanks! I will listen out, but more importantly I will list your net on our web page of BA nets here!

It's somewhere at either:

<http://www.mnsinc.com/bry/hamlynx.htm>

or maybe

<http://www.mnsinc.com/bry/hamfiles.htm>

73 - Bry, AF4K

Date: Wed, 1 Oct 1997 17:59:49 -0400
From: "Brian Carling" <bry@mnsinc.com>
Subject: Re: Ticket for Boatanchors and glowbugs....

Ooops!

It was actually:
<http://www.mnsinc.com/bry/mega/swapnets.htm>

Thank you!

Bry - AF4K

Date: Wed, 01 Oct 1997 20:17:43 -0500
From: "R. Eric Sluder" <kb9bgs@sprintmail.com>
Subject: CW is coming back (according to the Wall)

Hey folks,

Just wondered if anyone else saw the article today in the Wall Street talking about CW and how it's coming back. It talked about folks who belong to the American Telegraph Club who communicate via morse over their modems to each other (wondered if they meant by using the Net?). They even quoted the ARRL, and the Naval academy who still teaches CW. I was quite suprised and delighted to see the article!

Just thought I'd let you all know in case you can still grab a copy. BTW I wrote the above from memory which is excellent but short, so there could be some errors.

73,

Eric

- --

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~~~~~
R. Eric Sluder, KB9BGS                                KB9
3339 Eden Way                                           Believing
Carmel, IN 46033 USA                                    God's
kb9bgs@sprintmail.com                                   Son
~~~~~
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Date: Thu, 25 Sep 1997 21:06:41 -0400
From: "Steve Ellington" <n41q@iglou.com>
Subject: Re: CW is coming back (according to the Wall)

There is indeed a large organization centered in Canada that dials into a

server via modems and using special converters, send American Morse which activates old fashion sounders for that click click sound. I understand they have 100's of members.
Yes, special forces does require morse code ability. A friend of mine just spent 2 months of code training in CA.

N4LQ

- -----

>

> Just wondered if anyone else saw the article today in the Wall Street
> talking about CW and how it's coming back. It talked about folks who
> belong to the American Telegraph Club who communicate via morse over
> their modems to each other (wondered if they meant by using the Net?).
> They even quoted the ARRL, and the Naval academy who still teaches CW.
>
>

Date: Thu, 2 Oct 1997 05:02:53 +0000
From: Sandy W5TVW <ebjr@worldnet.att.net>
Subject: More "CX" lore...

It is nice reading the comments of the "CXers" out there! All the trials and tribulations of getting things going, the failures of gear at critical times, how to get it all setup ahead of time. (Not to mention trying to find the room to place everything, and the maze of cabling that results!)

I am disappointed though. It's already Wednesday and not one single "OO" report in my mailbox! I'm sorta waiting now for the next one!

73,

E. V. Sandy Blaize, W5TVW

"Boat Anchors collected, restored, repaired, traded and used!"
417 Ridgewood Drive
Metairie, LA., 70001

Date: Thu, 02 Oct 1997 18:28:23 +1000
From: Murray Kelly <mkelly@powerup.com.au>
Subject: Re: Doug DeMaw, W1FB, SK

That's really depressing. I am in the middle of one of his books, too.

I had reason to contact him earlier this year about an idea he tried 10 years ago and never saw mention of it again. He said he just forgot it and moved on. Wish I could be as inventive.

A sad loss to amateur radio.

Tom R. Rice wrote:

> > Acclaimed ham radio icon Milton F. 'Doug' DeMaw, W1FB, died
> > September 28. He was 71. One of the most widely published technical
> > writers in Amateur Radio, DeMaw was diagnosed with leukemia earlier
> > this year and had been in failing health in recent weeks.

- -

* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *

Date: Thu, 2 Oct 1997 10:56:26 -0400 (EDT)
From: leeboo@ct.net (Leon Wiltsey)
Subject: [none]

Hi Gang
In a recent post a group called 2000 was mentioned as
helping the disabled learn and use morse code.
Anybody out there know how to contact them?

Thank the good LORD for all that you have!!!

67yr old semi disabled senior
(stroke got my eyesight balance and coordination) SO ONLY BA'S NO SOLID STATE

Leon (lee) Wiltsey 4600 Lake Haven blvd Sebring fl. 33872 KF4RCL
TECK+

Date: Thu, 2 Oct 97 8:42:17 MDT
From: "Mark Dittmar" <Mark_Dittmar@maxtor.com>
Subject: 46 tube

I recently purchased a box of about 100 tubes. One of the tubes
really caught my eye because it was a very aesthetically pleasing, large
globe tube, RCA Radiotron type 46. I looked it up in a couple of
different tube manuals, and it is classified as a " dual grid power
amplifier "; not a triode power amp, or a tetrode. Was the extra grid
used just like a screen grid? Or, did it have another, perhaps more
arcane use ?

Just curious,

Mark Dittmar

Date: Thu, 2 Oct 1997 11:33:09 -0400 (EDT)
From: EWoodman@aol.com
Subject: Variable Antenna Coupling and Electrostatic Shielding

I'm putting together a variocoupler for my regen project. It's basically a
coil wound on a 3" diameter tube with a 2" diameter coil which rotates inside
of it. The insulated shaft which attaches to the inside coil goes out
through the side of the large coil and is coupled to a panel control made
from an old rotary switch. I thought I was all set but the discussion of

stray capacitance got me worried a bit.

Reading through the manual for the SE1420 receiver which Bob Keys put out for our perusal, I came across the section on the electrostatic shield for the secondary coupling coil which rotates inside the antenna coil. According to the description they used another winding layer wound in the opposite direction over the coupling winding with one end attached to the low potential end of the coupling coil and the other end dead-ended (no connection). This would seem like a simple fix for me. Am I missing something?

73 Eric K1YRV

Date: Thu, 2 Oct 1997 13:31:04 -0400 (EDT)

From: rdkeys@csemail.cropsci.ncsu.edu

Subject: Re: Variable Antenna Coupling and Electrostatic Shielding

> I'm putting together a variocoupler for my regen project. It's basically a
> coil wound on a 3" diameter tube with a 2" diameter coil which rotates inside
> of it. The insulated shaft which attaches to the inside coil goes out
> through the side of the large coil and is coupled to a panel control made
> from an old rotary switch. I thought I was all set but the discussion of
> stray capacitance got me worried a bit.

Excellent project!

At HF, the effects of stray capacitances are probably minimal, practically speaking. With a variometer coil, you can reduce it down but there will always be a higher level of stray capacitance there, than with other methods such as two coils moved axially together or apart for coupling.

At 160 and 80 meters, the effects are not all that great though.
At 40 and above, stray capacitance might make life difficult, unless you went to exotic forms or wide parts spacings, etc.

The variocoupler would make a great way to fine control the regeneration, though, to set the approximate point, where a fine throttle control could set it exactly. I have used that method and it works very well.

> Reading through the manual for the SE1420 receiver which Bob Keys put out for
> our perusal, I came across the section on the electrostatic shield for the
> secondary coupling coil which rotates inside the antenna coil. According to
> the description they used another winding layer wound in the opposite
> direction over the coupling winding with one end attached to the low
> potential end of the coupling coil and the other end dead-ended (no
> connection). This would seem like a simple fix for me. Am I missing
> something?

This was basically a 600-10000 meter receiver. At those frequencies, the stray capacitance would have a larger effect, because of the larger number of turns of wire used in the construction of the coil links, etc.

Practically, in my hands, if you stick to a link of two or fewer turns at HF, the effects are nil. If you use a 50 turn link, which I have tested recently during some xtal set experiments (two identical coils used for both input tuning and coupling, and secondary tuning), it seems to become more of a problem, with stray capacitance coupling into the secondary until you get to very large coupling distances. As an aside, two identical coils wound with about 60 turns each on 2.5 inch black plastic pipe still worked

quite well with 12 inches of coupling spacing, and the tuning was razor sharp, even on xtal sets if both the primary and secondary were tuned (is there any other way.....(:+)}.....).

I would suggest that if you want to use a larger than 1/2/3 turns of link, at HF, then you may want to approach the thing from a sliding coil type of arrangement where the distance between the coils is changed (as opposed to the rotational inductive link). The early Marconi type 100 and type 101 sets (if memory serves me correctly --- see Elmer Bucher's 1917 Practical Wireless Telegraphy for details) used this sort of arrangement, effectively. That would reduce the stray capacitive coupling effect as much as practically could be obtained, easily. The SE 1420 method would be fine at the lower frequencies, but could be a lot of effort to do correctly and get the best effect at HF. It might be worth trying though, for the fun of it on 160M. I dunno if it will do much on 80M.

If you stick to a 1/2/3 turn link with the variocoupler, you will probably get some stray capacitive coupling, but not appreciably much. As a test, compare the effect of using the link in the variometer, against using an external air-wound link of 1/2/3 turns and see if that throws the coupling out the door. If it pulls the frequency greatly, you have a lot of stray coupling capacitance effects. If it does not pull the frequency greatly, then the capacitance effects are minimal. For comparison, I get about a 50khz pull when going between a 1pf high-side coupling capacitance and a 1 turn link, with only about 10-15pf of grid tuning capacitance. If it pulls way out of the band, then you need to reduce the stray capacitance in the variometer, or if it works acceptably, just live with it. My expectation is that if it is only a 1/2/3 turn link, it will work just fine, regardless of a few pf of stray capacitance.

> 73 Eric KALYRV
>

Date: Thu, 2 Oct 1997 13:41:40 -0400 (EDT)
From: rdkeys@csemail.cropski.ncsu.edu
Subject: Re: Variable antenna coupling, was Re: Gain control in regennys

> A variocoupler should work fine. An old Frank Jones trick is to use a
> (U-spring or 90-degree) mono 1/4" phone jack as a panel bearing, bending
> the tip contact back just a little. You can either slide the antenna coil
> laterally or rotate it to vary the coupling. A piece of 1/4" diameter
> plastic rod is used for the control shaft.

That works very well! Thanks for bringing that up. I think it is also covered in one of Gernsback's hints in Radio News and also in some 1920's QST hints and kinks types of things. There is GOLD in them thar early QST's and Radio News thingies, if you can get access to them.

> Stray capacity's the bete noir of this trick, but the fix is easy: a
> Faraday Screen! Wind wire around a thin sheet of insulating material--the
> wire can be bare or enamelled or whatever, though bare wire must be spaced
> with care--space about the wire diameter. Stick it down with coil dope or
> Duco cement. Once the glue dries, take scissors and trim one end so all
> the "loops" are open. At the other end, remove the insulation etc. from
> the wires right along the edge and solder a hunk of small buss wire along
> it, leaving one end long to connect to ground and provide mechanical
> support. Mount the completed thing (which resembles a long-toothed comb
> stuck on a sheet of insulation) between the antenna coil and the tank
> coil. For best results, it should be at least 2x the coil diameter in all

> directions--4x is even better. Some sources peel off all the wire on one
> side, which can simplify mounting and keeping just the one ground
> connection.

Good Faraday shield design. That one would be simple to make.

The epitome of the use of the Faraday screen was in RCA's AR-1496 commercial HF regen receiver (1927 vintage). For RCA to use it in a commercial set would be suggestive that it worked pretty well. By the 30's though, it seems to generally have been dropped, and is not found in things like the RAL/RAK sets that use ceramics as coil forms, etc.

> Points of interest here are that even 15pF can be a lot, and may tend
> to pull the tuning as antenna coupling is changed. Changing from a direct
> connection to a "gimmick" will help, or you can be formal and hang a
> small, good-quality fixed condenser between the antenna and the
> variable-coupling cap. Also finding a condenser with low *minimum* C can
> be tricky, which is one argument for homebrewin' 'em--doesn't take too
> much thought to dope out a configuration with the lowest Cmin!

I have found that a 3 turn gimmick wrap on the high side lead of the coil to the grid coupling cap or a 1 pf pair of aluminum plates works pretty well. I usually opt for the pair of 1/2 inch square aluminum plates spaced 1/16 to 1/4 inch apart and they can be made easily out of junk scraps of aluminum and mounted on a pair of ceramic spacers and bent to give the ``right amount of coupling'' (about 1/8 inch works good for me).

Ahhh, such fun be the idiosyncracies and black arts of regenerators.....

This should be a good month.....(:+)}.....

Bob/NA4G

Date: Thu, 2 Oct 1997 19:13:43 -0400
From: "Brian Carling" <bry@mnsinc.com>
Subject: Glowbugs Chat

I finally got on the Glowbugs CHAT server that N6EV and SM5GNN have set up. It works!

Sadly, there was no one else on there.

What about a group "SKED" for say, 1200 UTC tomorrow?

I'd enjoy a LIVE chat with you chaps!

73 de AF4K, Bry

*** 73 from Radio AF4K/G3XLQ Gaithersburg, MD USA *
** E-mail to: bry@mnsinc.com *
*** See the interesting ham radio resources at: *
** http://www.mnsinc.com/bry/ *

AM International #1024, TENTEN #13582. GRID FM19. Using a SWAN 250 on 6m,
Other rigs: Valiant, DX-60/HG-10, FT-840, TM-261, Ameco TX-62, Gonset Communicator III
HTX-202...TEN-TEN #13582, DXCC #17,763 Bicentennial WAS

End of glowbugs V1 #126

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